STATE FOREST LAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/ watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

   Timber Sale Name: **LOAFER** *Agreement #:* **30-082879**

2. Name of applicant: **Washington State Department of Natural Resources**

3. Address and phone number of applicant and contact person:
   Pacific Cascade Region
   601 Bond Road
   PO Box 280
   Castle Rock, Washington 98611-0280
   Phone: (306) 274-2035
   Contact Person: Robert W. Johnson

4. Date checklist prepared: **07/02/2008**

5. Agency requesting checklist: **Washington State Department of Natural Resources**

6. Proposed timing or schedule (including phasing, if applicable):

   a. *Auction Date:* **March 2009**
   b. *Planned contract end date (but may be extended):* **October 2011**
   c. *Phasing:* **N/A**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   Timber Sale

   a. *Site preparation:*
   Some mechanical site preparation will be done during ground-based harvest activities. All units are planned for aerial spray site preparation.

   b. *Regeneration Method:*
   Units will be hand planted with native conifer seedlings following the completion of harvest operations (except thinning units).

   c. *Vegetation Management:*
   Competing vegetation will be monitored periodically. If competing vegetation is adversely affecting tree survival and growth, a manual or chemical release may be prescribed.

d. *Thinning:*
A survey at approximately 12 to 15 years of age will determine if pre-commercial thinning is needed. The stands will be evaluated at approximately 25 to 40 years of age to determine if commercial thinning will be necessary.

Roads:
Roads remaining at the termination of the sale will be used for future forest management activities. Road maintenance and periodic ditch and culvert cleanout will occur as necessary. The L-1509 Road will be constructed with the sold Corn Palace Timbersale in 2009 or 2010. See question A.11.c. below for further details.

Rock Pits and/or Sale:
The primary rock sources for this proposal will be the Big Mamma Pit on the L-1000J road in the NW ¼ of Section 28, Township 3 North, Range 4 East, W.M. and the L-1216 pit in the SE ¼ of Section 3, Township 3 North, Range 4 East, W.M. An optional, presently undeveloped, pit is located on the L-1214 road in the E1/2 SW1/4 of Sec. 11 T03N, R04E, W.M. All pits will be maintained in a safe and drained condition and may be used for other current or future road projects in the vicinity.

Other:
It is possible that a direct sale of firewood from the sale area may occur following harvest completion. If not, then firewood salvage of logging residue by individuals may occur up to one year following harvest.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐ *303 (d) – listed water body in WAU:* ☐ *temp* ☐ *sediment* ☐ *completed TMDL (total maximum daily load):*
☐ *Landscape plan:*
☐ *Watershed analysis:*
☐ *Interdisciplinary team (ID Team) report:*
☒ *Road design plan:* **Available upon request at the Pacific Cascade Region office.**
☐ *Wildlife report:*
☐ *Geotechnical report:*
☒ *Other specialist report(s):* **Cultural Resource Technician report (under draft with cooperation from affected Tribes, DAHP, and DNR), biologist report**
☐ *Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☒ *Rock pit plan:* **Available upon request at the Pacific Cascade Region office.**
☒ *Other:* **Spotted owl habitat mapping, marbled murrelet reclassified habitat maps, Forest Practices Activity Maps, WAU map for rain-on-snow areas, Policy for Sustainable Forests (PSF, 2006), State Soil Survey, DNR GIS databases, Habitat Conservation Plan (HCP, January, 1997), HCP Checklist, Slope Stability Checklist, Planning and Tracking Special Concerns Report and associated maps, Larch Landscape Road Maintenance and Abandonment Plan #R2900971, Weighted Old Growth Habitat Index (WOGHI), Riparian Forest Restoration Strategy (RFRS).**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

☒ *HPA* ☐ *Burning permit* ☐ *Shoreline permit* ☐ *Incidental take permit* ☐ *FPA # **2918962*** ☐ *Other:*
Potential tailholds across type 'S' and/or 'F' streams will be implemented in accordance to the 10-year blanket HPA signed by the Washington Department of Fish and Wildlife on September 29, 2005. This HPA only allows for tailholds and not for yarding or cutting within these buffers or streams. Another HPA will be needed for installing a culvert in a fish bearing stream associated with RMAP work. There is also a potential need for diversions of type 4/5 streams within ¼ mile of type 3 waters for culvert installs/removals.

11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. *Complete proposal description:*

This proposal is within the Larch Landscape located approximately 19 miles east of Battle Ground, Washington. The Loafer timber sale proposal is five-unit regeneration harvest with five Riparian Management Zones (RMZ) thinning units totaling approximately 217 net harvest acres. There are also 6 acres of proposed right-of-way removal. The overall dominant tree species in the proposal is Douglas-fir with small components of western hemlock, western redcedar, noble fir, red alder, and bigleaf maple. There are approximately 20 harvestable acres on State Forests Board trust lands (01) and 197 harvestable acres are on Common School trust lands (03).

Unit	Proposal Acres	RMZ/WMZ Acres	Unstable Slope Acres	Existing Road Acres	Sale Acres	Leave Tree Clump Acres	Harvest Acres	Harvest Volume
name	*gross*			*within unit*		*clumped acres*	*Net*	*Est. MBF*
1	76	26			50	2	48	1670
2	104	24			74	7	67	3584
3	108	35			73	5	68	1093
4	17	4			13	1	12	164
5	16	3			12	1	11	238
RMZ Thin 1	1				1		1	8
RMZ Thin 2	1				1		1	8
RMZ Thin 3	2				2		2	16
RMZ Thin 4	1				1		1	8
RMZ Thin 5	1				1		1	8
R/W 1	2				2		2	6
R/W 2	1				1		1	1
R/W 3	2				2		2	27
R/W 4	1				1		1	14
Totals	333	98			234	16	218	6845

b. *Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.*
The proposed activity will take place in a stand of predominantly Douglas-fir with a small component of western hemlock, western redcedar, noble fir, red alder and big leaf maple. The average conifer age ranges from 59 to 69-years-old. The understory component of the stands consists mainly of salal, sword fern, huckleberry, Oregon grape, bear grass, and vine maple with a small component of salmonberry. The elevation of the proposal ranges from 1,300 feet to 2,200 feet.

c. *Road activity summary. See also forest practice application (FPA) for maps and more details.*

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		11600	13	
Reconstruction		6084		
Abandonment		8552	10	
Bridge Install/Replace				
Culvert Install/Replace (fish)	1			1
Culvert Install/Replace (no fish)	5			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. *(See timber sale map available at DNR region office, and/or color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")*

a. Legal description:
Sections 2, 3, 10, 11 and 16, Township 3 North, Range 4 East, W.M.
Sections 1 and 28, Township 3 North Range 4 East, W.M.
Sections 35, Township 4 North Range 4 East, W.M.

b. *Distance and direction from nearest town (include road names):*
From Highway 503:
For Units 1, 3, 4 and 5: Turn right onto (milepost 13.8) NE 152nd Avenue and follow for approximately 1.6 miles to Lucia Falls Road. Follow Lucia Falls Road for approximately 7 miles and turn right onto Sunset Falls Road; follow Sunset Falls Road for approximately 2 miles. Turn right onto Dole Valley Road and follow for approximately 2.2 miles to the L-1100 on the left. Follow the L-1100 for approximately 2.1 miles to the L-1210 gate. Continue on the L-1210 for approximately 1.4 miles to the L-1216 on the left. Follow the L-1216 for 0.2 miles to access Units 3, 4 and 5. Continue on the L-1210 past the L-1216 for approximately 1.5 miles to access Unit 1.
To access Unit 2: Continue past the L-1100 on Dole Valley Road for approximately 3.6 miles to the L-1000N and L-1509 junction.

c. *Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")*

WAU Name	WAU Acres*	DNR WAU Acres*	Sub-Basin Number	Sub-Basin Acres*	DNR Sub-Basin Acres*	Harvest Acres in Sub-Basin (estimated)
Rock Creek	**21,377**	**16,248**	**5**	**3,014**	**1,670**	**4**
			7	**1,569**	**1,280**	**116**
			9	**1361**	**890**	**25**
			10	**1391**	**1391**	**67**

13. *Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)*

Rock Creek WAU

Approximately 76% of the land within the Rock Creek WAU is managed by the DNR. Approximately 55% of sub-basin 5, 87% of sub-basin 7, 65% of sub-basin 9 and 100% of sub-basin 10 is under DNR management. There has been periodic regeneration harvesting throughout the WAU. Within the Rock Creek WAU, parts of 22 regeneration harvests (Siamese, Spotted Deer, Verde, Rodeo Ride, Buttercup, Eikcam, Mixed Berry, Stellar, Calico, Ginger, Dole, T-Bone, Hoosier, Salsa, Camp Robber, Caveman, English Patient, Gadwall, Legacy, Airstream, Log Dog, Abby Road, Little Goose, Number Six, and Good seed) have been completed in the last 7 years. Iron Chef Unit 1 is the closest regeneration harvest completed within the last 7 years with Good Seed Unit 2 also nearby. The Corn Palace timber sale, adjacent to Loafer Unit 2, will likely be active by June 2009. Approximately 72% of the WAU managed by the DNR will be greater than 25-years-old after harvesting has been completed on the presently planned sales. The plans of the adjacent landowners in the WAU are unknown.

Many areas within the Rock Creek WAU are candidates for future regeneration and commercial thinning harvest activities. Additional road building and rock pit development may occur for access to forest management activities on DNR managed land and other ownerships.

Rock Creek WAU	WAU ACRES	ACRES OF EVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	ACRES OF UNEVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	PROPOSED EVEN-AGED HARVEST IN THE FUTURE	PROPOSED UNEVEN-AGED HARVEST IN THE FUTURE
DNR MANAGED LAND	15,889	1,170	194	136	0
PRIVATE OWNERSHIP	5,488	304	260	UNKNOWN	UNKNOWN
TOTAL	21,377	1474	454	UNKNOWN	UNKNOWN

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐Flat, ☐Rolling, ☐Hilly, ☐Steep Slopes, ☒Mountainous, ☐Other:

1) *General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).*
The Rock Creek WAU is situated in the western foothills of the Cascade Mountain Range and contains a variety of landforms, ranging from approximately 600 to 4,350 feet in elevation. Slopes vary from 0% to over 100%. The climate is moderate with 70 to 100 inches of precipitation annually. Approximately 33% of the WAU, or 6,994 acres, is within the rain-on-snow zone. Timber types include Douglas-fir, western hemlock, western redcedar, noble and Pacific silver fir, red alder and bigleaf maple. The major drainage for the WAU described is the East Fork of the Lewis River.

2) *Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).*
This proposal is located at approximately 1,400 feet to 2,200 feet in elevation. The timber types are primarily Douglas-fir with small components of noble fir, western hemlock, red alder and bigleaf maple. The age of the timber to be harvested ranges from approximately 59 to 69-years-old. Slopes within the proposal range from 0% to 65%. This proposal is similar to other areas in the WAU's.

b. What is the steepest slope on the site (approximate percent slope)?
The steepest slope in the proposal area is approximately 65% for short distances in localized areas.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
3607	GRAVELLY SILT LOAM	5-30	60	INSIGNIFIC'T	MEDIUM
3918	KINNEY-SKOLY-COMPLEX	30-65	58	No Data	No Data
3908	COBBLY SILT LOAM	5-30	53	INSIGNIFIC'T	MEDIUM
3917	KINNEY-SKOLY-COMPLEX	50-30	30	No Data	No Data
7403	COBBLY LOAM	30-65	25	LOW	MEDIUM
4222	V.COBBLY SILT LOAM	30-65	8	LOW	MEDIUM

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
Yes.

1) *Surface indications:*
Large, scattered boulders and wetlands.

2) *Is there evidence of natural slope failures in the sub-basin(s)?*
☐*No* ☒*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*
The landslide layer in the State Uplands Viewing Tool shows an ancient deep-seated landslide in Unit 2 of the proposal area. Consulted DNR geologist about issue and was told it poses no immediate threat.

3) *Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?*
☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*
Associated management activity:

4) *Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*
☒*No* ☐*Yes, describe similarities between the conditions and activities on these sites:*

5) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*
The steepest areas of the sale were bounded out of the sale area or were protected with leave tree clumps to reduce potential impact on steep slopes. Leave trees were also placed around type 5 (Ns) waters and seeps to protect these features and decrease the possibility of slope failures. Where feashible buffers were extended beyond minimum requirements to provide additional protection. New road construction was proposed in areas that would have the least effect on potential unstable slopes or hydrological function.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: **12** *Approx. acreage new landings:* **5** *Fill source:* **L-1214 pit, Big Mamma Pit**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
A small amount of incidental erosion could occur during the course of road building, rock pit development activities and yarding.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
Approximately 2% of the total proposal will be rocked road. Of the 11,600 feet of new construction 8552 feet will be abandoned at close of the sale.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)
Measures to reduce erosion on roads or during active road construction:
- **Roads will be either out-sloped or constructed with crowns, ditches, and cross drains.**
- **Soils exposed during road construction will be grass seeded and fertilized.**
- **Seasonal timing restrictions will prohibit road construction during wet weather conditions.**
- **Cross-drains will be installed and maintained.**
- **Sediment delivery will be addressed as needed during operations using of water bars, silt traps and water course diversions during bridge and culvert installation.**
- **There will be periodic maintenance and inspection of the road system to insure proper drainage.**

Measures to reduce erosion during active logging operation:
- **Tracked skidders will be allowed only when dry soil conditions permit.**
- **Ground based yarding will be restricted to slopes less than 35% and during dry soil conditions only.**
- **The lead end of logs will be suspended during all yarding operations.**
- **The potential for sediment delivery will be addressed as needed during operations and may include the use of water bars or silt traps.**

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling*, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
Minor amounts of engine exhaust from logging equipment and dust from vehicle traffic and logging equipment are expected while the project is active.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
None.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map available at DNR region office, or forest practice application base maps.)*

a) Downstream water bodies:
There are ten type 3 streams, five type 4 streams and tweleve type 5 streams (or stream segments) in the immediate vicinity of the site. The streams in Units 1, 3, 4 and 5 and flow into a tributary of Coyote Creek which is a tributary of Rock Creek. The streams in Unit 2 flow west into Cold Creek which is a tributary of Rock Creek and eventually joins the East Fork of the Lewis River. The wetland in Unit 2 is fed by two type 3 streams, a type 4 stream, and 3 type five streams and is drained by the same type 3 stream which also is a tributary to Cold Creek. Wetland between units 4 and 5 is fed by small seeps and a small type 5 stream and does not appear to be drained by surface flow.

b) *Complete the following riparian & wetland management zone table:*

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Cold Creek	3	1	167
Coyote Creek	3	1	167
Stream	3	7	167
Stream	4	5	100
Stream	5	5	Leave tree buffered
Wetland	Forested	3	167

c) *List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.*
Type 3 streams were buffered with an average distance of 167 feet as based off of the Douglas-fir site index obtained from soils reports. The type 4 streams are buffered by at least 100 feet on all sides. The type 5 streams have been buffered with leave trees where possible. Where cable tailhold corridors may be necessary in RMZs, all activities will comply with the HCP and the RFRS. There are three wetlands in immediate vicinity of the proposal; one along the west edge of Unit 2, one in the south east corner of Unit 2 (associated with the Corn Palace timber sale) and one between Units 4 and 5. The wetland along the west edge of Unit 2 and the wetland between Units 4 and 5 were buffered with an average buffer width of 167 feet. The southern edge of the wetland's buffer in Unit 2 will be thinned in accordance with RFRS thinning guidelines and documented as a riparian thinning rather than a wetland thinning. The wetland associated with the Corn Palace Timbersale was already buffered with approximately a 167 foot buffer; this buffer was followed for the Loafer Unit 2 sale boundary. No equipment will be allowed within 30 feet of the edge of the 100-year floodplain of any stream. Harvest corridors will be minimized in quantity and width (less than twelve feet in width where possible) and placed in natural voids. Where the old grade of the L-1216 road passes through part of the Unit 4/Unit 5 wetland WMZ, the right-of-way will be kept to a minimum. While this wetland only requires a 100-foot buffer, a site index buffer of 167 feet was applied to encompass additional unique, non-wetland features that would have been excluded from a 100-foot buffer. The regional biologist has made a site visit and approves of the plan. Cross-drain culverts will be placed as needed to minimize changes in existing hydrological channels. Trees that are damaged or cut for the puposes of road right of way in the inner zone of any RMZs will remain on site as live trees, snags or down woody debris. Five trees per acre were marked for down wood recruitment in the RFRS thinning units and are to be felled toward the streams. A request for a Hydraulic Project Approval has been submitted to the Washington Department of Fish and Wildlife as documented in the Forest Practices Application. All streams have been evaluated per the Washington State Forest Practices Interim Water Type Rules and protected per current HCP guidelines and procedures (1996 Emergency Water Typing Rules).

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐*No* ☒*Yes (See RMZ/WMZ table above and timber sale map available at DNR region office.)*
Description (include culverts):
Timber felling, bucking, cable yarding, ground-based yarding, and/or road building will take place within 200 feet of all the described waters/wetlands.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*
☐*No* ☒*Yes, description:*
There will be multiple culvert installations in live streams (type 5) which may or may not require diversion, depending on whether it is flowing or not. There will also be a fish passage pipe placed in a type 3 stream and another large pipe installed in a Type 4 stream associated with an RMAP project.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☐*No* ☒*Yes, describe location: See road plan available at DNR region office.*

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒*No* ☐*Yes, type and volume:*

7) *Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?*
Generally, the high potential areas are located on slopes of 65% or greater and often involve unstable soils and/or steep head walls. Some past natural failures have entered streams in small amounts. However, no slope failures associated with past timber harvest activities have been identified within the sub-basins, and none have been observed along the existing roads in these sub-basins. With the proposed mitigating measures implemented, this proposal is not expected to contribute material to surface waters. (See questions B.1.c, B.1.d, B.1.f, B.1.h, and B.3.9).

8) *Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?*
☒*No* ☐*Yes, describe changes and possible causes:*

9) *Could this proposal affect water quality based on the answers to the questions 1-8 above?*
☐*No* ☒*Yes, explain:*
This proposal could possibly introduce minor amounts of sediment into the streams adjacent to the proposal area as a result of road building and logging operations during early stages of activity. The erosion control measures and operation procedures outlined in B.1.f. and B.1.h. are expected to minimize the chances of sediment delivery.

10) *What are the approximate road miles per square mile in the WAU and sub-basin(s)?*
Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☒*No* ☐*Yes, describe:*
Rock Creek WAU averages approximately 4 miles of road per square mile across all ownership. It is estimated that sub-basin 5 averages approximately 4 miles of road per square mile and it is estimated that sub-basin 7 averages approximately 4 miles of road per square mile. Sub-basin 9 averages approximately 3 miles of road per square mile. Sub-basin 10 averages approximately 3 miles of road per square mile.

11) *Is the proposal within a significant rain-on-snow (ROS) zone? If not,* ***STOP HERE*** *and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.*
☐*No* ☒*Yes, approximate percent of WAU in significant ROS zone.*
Approximate percent of sub-basin(s):
Rock Creek WAU: 33%
Sub-basin 5: 16%
Sub-basin 7: 66%
Sub-basin 9: 52%
Sub-basin 10: 69%

12) *If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?*
Rock Creek WAU: 83%
Sub-basin 7: 86%
Sub-basin 5: 74%

1. SUB-BASIN NAME	2. TOTAL ROS ACRES (DNR) WITHIN SUB-BASIN	3. HYDRO MATURE TARGET ACRES (2/3 of Column 2)	4. CURRENT DNR SUB-BASIN ACRES IN HYDRO MATURE FOREST IN ROS	5. ACRES OF HYDRO MATURE FOREST TO BE REMOVED	6. SUPRLUS (+) OR DEFICIT (-) ACRES AFTER ACTIVITY
Rock Creek sub-basin 7	1039	693	672	54	95
Rock Creek sub-basin 9	1104	736	430	1	17
Rock Creek sub-basin 10	950	633	701	18	73

13) *Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?*
☐*No* ☒*Yes, describe observations:*
Normally, there are few significant changes associated with peak flows in the WAU or sub-basins. However, in the winter of 1996, a 100-year event occurred. The rainstorm set rainfall and flood level records in southwest Washington and northwest Oregon. The event caused many shallow mass-wasting events. Many stream channels were altered in this event due to extremely high stream flows with accompanying sediment loads and possibly large woody debris delivery. The full extent of this is not known.

14) *Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.*
This proposal may slightly change the timing, duration, or amount of peak flow. Flow rates may increase slightly during low flow periods due to decreased transpiration and interception during the first decade of new forest growth.

15) *Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?*
☒*No* ☐*Yes, possible impacts:*

16) *Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.*
- **The buffers described in question 3.a.1.c above will prohibit harvest activities within an average of approximately 167 feet of type 3 streams and wetlands and within 100 feet of the type 4 streams except where RFRS activities are being applied.**
- **Leave trees were placed around type 5 streams where possible.**
- **Timber will be felled away from all streams(except for trees to be felled toward stream for large woody debris recruitment.)**
- **There will be a 30-foot Equipment Limitation Zone associated with all type 5 streams.**
- **Any slash that may enter a stream would be cleaned out per contract requirements. Further erosion control measures will be implemented if necessary.**
- **Cross-drains will be installed and maintained.**
- **Sediment delivery will be addressed as needed during operations and may include the use of water bars, silt traps, and water course diversions during bridge and culvert installation.**
- **There will be periodic maintenance and inspection of the road system to insure proper drainage.**

b. Ground *Water*:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.
Relief culvert drainage may slightly increase ground water recharge directly below culvert outlets.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
Minor amounts of oil, fuel, and other lubricants may inadvertently be discharged to the ground as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site. This proposed activity is expected to have no impact on ground water.

3) *Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?*
☒*No* ☐*Yes, describe:*

a) Note protection measures, if any.
None.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
Storm water will be the only runoff associated with this proposal. On roads, storm runoff will be collected by road ditches and diverted through cross-drains over energy dissipaters and onto the forest floor. Within the harvest unit, runoff will follow natural topography and be largely absorbed into the ground.

2) Could waste materials enter ground or surface waters? If so, generally describe.
Due to the wide buffers on the streams associated with this proposal, no logging slash from harvest activities is anticipated to enter perennial waters or type 5 streams.

a) Note protection measures, if any.
Any logging slash that inadvertently enters the type 5 streams during the process of harvesting will be removed. Leave trees were left clumped and individually marked along the type 5 streams in all units.

See question B.1.h. for site specific protection measures to help control erosion and protect water quality.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.

4. Plants

a. Check or circle types of vegetation found on the site:

☒deciduous tree: ☒alder, ☒maple, ☐aspen, ☐*cottonwood,* ☐*western larch,* ☐*birch,* ☐other:
☐evergreen tree: ☒*Douglas fir,* ☐*grand fir,* ☐*Pacific silver fir,* ☐*ponderosa pine,* ☐*lodgepole pine,* ☒*western hemlock,* ☐*mountain hemlock,* ☐*Englemann spruce,* ☐*Sitka spruce,* ☒*red cedar,* ☐*yellow cedar,* ☒other: Noble Fir
☒shrubs: ☒*huckleberry,* ☒*salmonberry,* ☒*salal,* ☒*other:* **Oregon grape, vine maple, bracken fern, deer fern, sword fern, maidenhair fern, Oregon oxalis, vanilla leaf, blackberry**
☒grass
☐pasture
☐crop or grain
☒wet soil plants: ☐cattail, ☐buttercup, ☒bullrush, ☒skunk cabbage, ☒*devil's club,* ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☐other types of vegetation:
☐*plant communities of concern:*

b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*
Approximately 6,845 MBF of primarily Douglas-fir with smaller components of western hemlock, western redcedar, noble fir, red alder and bigleaf maple will be removed from the site. The age of the timber ranges from 59 to 69 years of age. Mechanical site preparation will be needed before planting on portions of the harvest area to establish a viable future plantation. Some vine maple, huckleberry, and salmonberry will be removed during harvest activities on mobile ground to create 400 well-distributed plantable spots per acre. It is probable that chemical site prep will be needed, as there is heavy brush competition on parts of the sale area.

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")
Unit 1 is bounded by Coyote Creek to the south and a type 3 tributary to Coyote Creek to the north and west. The east edge is bounded by 55 to 65-year-old Douglas-fir that is managed by the DNR.

Unit 2 is bordered to the north and east by 59 to 69-year-old Douglas-fir. The west edge borders the Cold Creek RMZ. To the south are a type 3 RMZ and the Corn Palace timber sale. All surrounding lands are owned by the DNR.

Unit 3 is bounded by type 4 RMZ to the west and type 3 RMZ to the east and south. The north edge is adjacent to a 55 to 65-year-old Douglas-fir stand managed by the DNR.

Unit 4 is bordered to the north and east by DNR managed stands with similar characteristics. South of Unit 4 is a privately owned regeneration harvest, that was harvested and replanted in 2006. The west boundary is a buffer for a small wetland that is comprised of red alder, cherry and hazel.

Unit 5 is bordered to the east by the same wetland that makes the west border of Unit 4. South of Unit 5 is the Iron Chef regeneration harvest. To the north is a mix of 50 to 60-year-old Douglas-fir and red alder.

2) *Retention tree plan:*

TSU/Area	*Distribution Method for Retention Trees and Snags*	*Acres in Clumps*	*Total Trees Left*
1	**Clumped and Scattered**	**2**	**403**
2	**Clumped and Scattered**	**7**	**611**
3	**Clumped and Scattered**	**5**	**584**
4	**Clumped and Scattered**	**1**	**104**
5	**Clumped and Scattered**	**1**	**96**

All units will have an average of eight wildlife and green recruitment leave trees per acre remaining on site upon completion of harvest activities. All retained trees will provide wildlife habitat, older forest components, and a seed source to surrounding areas. Leave trees were selected to retain snags, species diversity, large diameter trees and deformed wildlife trees. Where available, snags from the Yacolt Burn were protected by bounding out leave islands around them; however, very few snags from the Yacolt Burn were present in the proposed area. GIS data show low or no old growth potential within the sale area, however some old growth trees were found. These trees were protected with leave trees clumps. The site will be replanted with conifer seedlings at a stocking level that meets or exceeds Forest Practices standards. This proposal was screened for potential old growth. No screening points that indicate a moderate or high likelihood of old growth within or adjacent to the proposal area were found.

c. List threatened or endangered *plant* species known to be on or near the site.
None found in database search.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
See question A.11.b and B.4.b.2 retention tree narrative above.

5. Animal

a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☐heron, ☐eagle, ☒songbirds, ☐*pigeon*, ☒other: **ravens, owls, ruffed grouse**
mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☒other: **chickaree, mountain beaver, bobcat, coyote, mountain lion, porcupine**

fish: ☐bass, ☒salmon, ☒trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐*talus slopes,* ☐*caves,* ☐*cliffs,* ☐*oak woodlands,* ☐*balds,* ☐*mineral springs*

b. List any threatened or endangered species known to be on or near the site *(include federal- and state-listed species).*

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
1	66843	WINTER STEELHEAD	CANDIDATE	DEPRESSED
1	66843	SUMMER STEELHEAD	CANDIDATE	UNKNOWN

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☐*Other migration route:* *Explain if any boxes checked:*
This proposal is located in the Columbia River Flyway, which is part of the Pacific Flyway. Migratory waterfowl also use the Columbia River Flyway; however, the area in which this proposal is contained is not generally the type of area used for resting or feeding by migratory waterfowl. Many neotropical migratory birds are closely associated with riparian areas, cliffs, snags, and structurally unique trees of Pacific Northwest forests. Riparian areas and special habitats are protected through implementation of DNR's HCP. RMZs, WMZs and leave trees should help provide future legacy stand components favorable to mature forest dependent species.

d. Proposed measures to preserve or enhance wildlife, if any:

- **There will be a minimum of eight leave trees per acre consisting of conifer and hardwood species for green tree and snag recruitment, left clumped and scattered within the units. There are approximately 17 acres of leave tree clumps. Throughout all units there are a total 1,798 leave trees.**
- **Selected pockets of leave tree clumps and individually marked trees were left throughout the units in strategic locations, which contain wet areas, type 5 streams, down woody debris, snags, and various trees having desirable snag recruitment characteristics.**
- **Sale boundaries have been placed an average of approximately 167 feet away from type 3 streams and wetlands and 100 feet away from type 4 streams to maintain habitat/structure.**
- **Approximately 98 acres are buffered in RMZs and WMZs, which will eliminate or minimize sediment delivery as well as preserve fish and amphibian habitat.**
- **Wildlife travel corridors will be maintained through the units along riparian areas.**
- **Big game forage will improve as new regeneration and early plant species evolve post harvest.**
- **Any snags to be felled for safety reasons shall remain near where they fall.**
- **No existing down woody debris greater than 36 inches in diameter shall be removed from the site.**
- **As discussed in B-1-h and B-3-a-16, the proposed protection of fish bearing streams will help maintain the integrity of downstream conditions and not negatively affect the above mentioned species (to include Bull Trout) and their Essential Fish Habitats or Designated Critical Habitats found in Cold Creek, Cedar Creek, Coyote Creek, Rock Creek, and the East Fork of the Lewis River.**

This activity conforms to the PSF, the HCP, and Washington State Forest Practices rules and regulations.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
None.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.
There will be minimal health hazards due to operating heavy equipment and possible minor spillage of fuel and lubricating oils. The risk of forest fire is always present and will be increased for approximately two years following harvesting due to logging slash. Contractual clauses require operators to use established safety standards.

1) Describe special emergency services that might be required.
- **Firefighting by the Department of Natural Resources, which may be supported by local fire districts.**
- **Emergency medical and/or ambulance service for personal injuries.**
- **Responses by the Department of Ecology if a spill were to occur.**

2) Proposed measures to reduce or control environmental health hazards, if any:
- **Compliance with state laws.**
- **Fire equipment will be required on site during fire season.**
- **Operations will cease if relative humidity falls below 30%.**
- **Public access may be restricted during times of high fire danger.**

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
None.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.
Noise from rock drilling/crushing machinery, rock blasting, road building and logging equipment, chain saws, yarding whistles, and log/dump trucks will increase during periods of operation on a short-term basis.

3) Proposed measures to reduce or control noise impacts, if any:
None.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? *(Site includes the complete proposal, e.g. rock pits and access roads.)*
- **Timber Production**
- **Mutual use road easements have been granted to other forestland owners for forest management activities in the vicinity.**
- **Rock from rock pits may be sold to adjacent forest landowners for forest road maintenance.**

b. Has the site been used for agriculture? If so, describe.
No.

c. Describe any structures on the site.
None.

d. Will any structures be demolished? If so, what?
No.

e. What is the current zoning classification of the site?
Forest Land.

f. What is the current comprehensive plan designation of the site?
Resource Land.

g. If applicable, what is the current shoreline master program designation of the site?
Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
No.

i. Approximately how many people would reside or work in the completed project?
None.

j. Approximately how many people would the completed project displace?
None.

k. Proposed measures to avoid or reduce displacement impacts, if any:
None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
These harvest units will be reforested with commercial species and retained as forestland. This proposal is consistent with current land use designations and zoning regulations. See question A.11.b. above.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
Not applicable.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None.

c. Proposed measures to reduce or control housing impacts, if any:
None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?
None.

b. What views in the immediate vicinity would be altered or obstructed?

1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*
☐*No* ☒*Yes, viewing location:*
The proposal area will be visible from the Tarbell Trail system as well as from Silver Star Mountain. It is possible that the proposal area may be visible to some residential units in Dole Valley.

2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*
☒*No* ☐*Yes, scenic corridor name:*

3) *How will this proposal affect any views described in 1) or 2) above?*
The completed proposal as seen from Tarbell Trail will result in a removal of trees along approximately 1,500 feet of this trail. This proposal is similar to other forest management activities in the vicinity.

c. Proposed measures to reduce or control aesthetic impacts, if any:
The individually scattered leave trees, leave tree clumps, and RMZ's throughout the proposal will reduce the aesthetic impact. Leave tree clumps have been placed in areas to lessen the viewshed impacts. The harvest area will be re-planted with seedlings following the completion of harvest and site preparation activities.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?
None.

c. What existing off-site sources of light or glare may affect your proposal?
None.

d. Proposed measures to reduce or control light and glare impacts, if any:
None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?
Approximately 1,500 feet of the DNR Tarbell Trail system is located in the harvest area of the proposed Unit 2. In addition to this designated recreation opportunity, several informal recreation activities take place in the area such as hunting, horseback riding, hiking, mountain biking, and berry and mushroom picking.

b. Would the proposed project displace any existing recreational uses? If so, describe:
The use of the Tarbell Trail will be temporarily interrupted when harvest activities take place adjacent to the trail. The informal recreational opportunities addressed in question 12.a. above may also be temporarily interrupted during periods of operation on site.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
This proposal, the potential impacts on the trail, and planned mitigating measures have been discussed with a Pacific Cascade Region Recreation Forester. The leave trees and clumps that have been left adjacent to the Tarbell Trail will reduce the overall visual impact of the proposed activity. The following measures will be enforced with contract requirements during harvest operations to reduce or minimize impacts on Tarbell Trail use:

- **Lookouts will be required on the trail when timber falling takes place within 200 feet of the trail.**
- **Warning signs will be required where yarding activity takes place within 200 feet of the trail.**
- **The trail will be temporarily closed or re-routed while yarding and timber felling takes place over the trail.**
- **Slash mats will be constructed over trails where equipment crossings are necessary to protect trails, cut banks, fill slopes.**
- **Trails will be cleaned of debris upon completion of harvest and returned to a useable condition.**
- **No limitations or restrictions will be applied to harvest operations involving the user-built trails in the vicinity.**

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
Cultural resource sites are located near the area of the proposed activity. A cultural resources technician has surveyed the areas of high probability and found no artifacts or sites.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
There are documented prehistoric archaeological sites on the landscape that led our cultural resource technician to identify and survey high probability areas within the proposal. An old railroad grade was also discovered within the proposal and will be documented as a historical feature by a cultural resource technician (was also associated with the sold Corn Palace TBS). Additional cultural resources have been found within the proposal area. A Site Protection Plan will be completed with the cooperation of the affected Tribes, DNR, and DAHP.

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)
Documented cultural resources will be protected due to established wetland and riparian management zones and contractual measures designed to prohibit harvesting activities to disturb culturally sensitive areas.

Railroad grade will be preserved through mitigated measures similar to those established for the Tarbell Trail.

In the event that any unknown archaeological resources are encountered, ground disturbing activities would be halted and our Agency Archaeologist contacted to survey the site and develop a Site Protection Plan.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
See question A.12.b. above and the timber sale vicinity map.

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?
Traffic from this operation will marginally increase noise, dust, and vehicle density, which will require a heightened awareness for safety measures. Contractual clauses require the operator to use existing safety standards. Truck traffic from this individual operation should not increase the need for public road maintenance.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
No.

c. How many parking spaces would the completed project have? How many would the project eliminate?
None.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
Some new forest roads will be constructed. See question A.11.c. for details.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?
This proposal will have very little impact since all of the new road construction will be forest management roads that end on state land. All forest management roads to be utilized will be tributary to paved county roads, which already have residential truck traffic.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
The completed project will generate less that one vehicular trip per day on average. Up to twenty-five vehicular trips per day could occur during peak harvest activities. These trips would occur primarily between the hours of 5 a.m. to 5 p.m. on weekdays.

g. Proposed measures to reduce or control transportation impacts, if any:
See question B.14.a.1 above.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
No.

b. Proposed measures to reduce or control direct impacts on public services, if any.
None.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
None.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
None.

C. **SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision. Product Sales Forester 12/4/08

Completed by: for Aaron Nelson Natural Resource Specialist 1 Date: 11/6/2008

Title

PRODUCT SALES MANAGER 12/2/08

for Reviewed by: Eric Wisch State Lands Assist Region Manager Date: ~~11/6/2008~~

Title

Comments: ____________________